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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,835	08/14/2003	Yuk Cheung Au	P/4076-58	4066

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OSTROLENK FABER GERB & SOFFEN
1180 AVENUE OF THE AMERICAS
NEW YORK, NY 100368403

EXAMINER	
ALIE, GHASSEM	
ART UNIT	**PAPER NUMBER**
3724	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/642,835	AU ET AL.	
	Examiner	Art Unit	
	Ghassem Alie	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01/24/07*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12 and 21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12 and 21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *8/11/05(F.1-2)&9/24/05(F.3-4)* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price et al. (2,657,926), hereinafter Price, in view of Oaks et al. (5,079,980), hereinafter Oaks. Regarding claim 1, Price teaches an apparatus for indexing a length of film 17 for severance. Price also teaches that the apparatus includes a linear feeding device 20 operative to hold the film 17 and to feed a predetermined amount of film 17 to a trimming device 52 by moving linearly between an initial position and another position towards the trimming device 52. Price also teaches that the film support is a film holder 70 that is operable between a first position, wherein a gap is provided for the film 70 to pass through during the feeding to the trimming device 52, and a second position. Price also teaches that the film holder 70 is operable to a second position for clamping the film 17 along the length of a line extending transversely of the film 17 feed direction and along which the trimming device 52 serves the film. It should be noted that the film 17 is clamped between the holding film 17 and the film support positioned opposite of the film holder 70. It should also be noted that the film holder 70 extends transversely along the length of a transverse line. The film holding 70 clamps the film 17 along a transverse line and along which the trimming device trims the film. It should be noted that the transverse line on which the film holder 70 clamps the film is also located along the trimming device. This is also true in Oaks. In other words, the film is clamped by

the film holder 70 along a transverse line that s also located along the trimming device. See Figs. 1-3 and col. col. 3, lines 14-73 in Price. Price does not teach explicitly that the film holder 70 is located between the linear feeding device and the trimming device on the in-feed side of the trimming device. However, Oakes teaches the holding device is located between the feeding device and the trimming device on the in-feed side of the trimming device. See Figs. 7 and 8 and col. 5, lines 56-68 and col. 6, lines 1-62 in Oakes. It should be noted that Price' apparatus functions the same whether the film holder is position between the linear feed device and the trimming device upstream of the trimming device of the apparatus or the film holder located on the downstream of the trimming device of the apparatus, since in both locations film holder functions the same and holds the clamp the film when it is severed by the trimming device. It would have been obvious to a person of ordinary skill in the art to switch the location of the film holder and the trimming device in Price's cutting apparatus, in the manner as taught by Oaks, since the film holder functions the same whether is located downstream of the trimming device or upstream of the trimming device. In addition, It would have been obvious to one having ordinary skill in the art at the time the invention was made to switch the location of the trimming device and the film holder in Price's apparatus, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse, 86 USPQ 70.*

Regarding claim 21, Price teaches everything noted above including that an edge of the film holder 70 is substantially aligned with the trimming device 52 at a position where the trimming device serves the film 17. It should be noted that lateral edge of the film holder is aligned with the trimming device during the trimming.

3. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Oakes, as applied to claim 1, and in further view of Friberg et al. (3,813,974), hereinafter Friberg. Regarding claim 2, Price, as modified above, teaches everything noted above except that the linear feeder has a vacuum head coupled to a vacuum suction device. However, the use of vacuum head for displacing or moving a product is well known in the art such as taught by Friberg. Friberg teaches a vacuum head 8 for feeding a material 1 forward towards a cutter 12. See Fig. 1-4 and col. 2, lines 31-69 in Friberg. It would have been obvious to a person of ordinary skill in the art to replace the gripping head in Price's cutting apparatus, as modified by above, with the vacuum head as taught by Friberg, since Friberg's gripping head as an alterative for gripping material and moving the material forward functions the same as Price's gripping head.

Regarding claim 3 and 4, Price, as modified above, teaches everything noted above except that the head is changeable for different types of film. However, the use of different support surface for contacting film material or the like is well known in the art such as taught by Bruck (4,716,069). Regarding claim 4, Price, as modified by Firberg, does not teach a surface the linear feeding device contacting the film is made from material that has low static generation with the film. However, the use of supporting surface for the film from low or anti static material is well known in the such as taught by Bruke (4,716,069).

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Oakes, as applied to claim 1, and in further view of Igarashi (2002/0039119). Regarding claim 5, Price, as modified by above, teaches everything noted above except a linear encoder coupled to the linear feeding device for determining the position of the linear feeding device.

However, the use of encoder with a carriage for a feeder is well known in the art such as taught by Igarashi. Igarashi teaches a linear encoder 9 coupled to a linear carriage 3 for determining the position of the carriage. See Fig. 1 and page 1, paragraphs 3-6 in Igarashi. It would have been obvious to a person of ordinary skill in the art to provide the feeding device in Price's cutting apparatus, as modified by above, with the linear encoder, as taught by Igarashi, in order to determined the position of the feeding device.

5. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Oakes, as applied to claim 1, and in further view of Rosenthal (2,214,478) and Ando et al. (2002/0057912), hereinafter Ando. Regarding claim 6, Price, as modified by Oakes, teaches everything noted above including a film reel 102 for supplying the length of film. Price, as modified by Oakes, does not teach sensors positioned adjacent to the film reel operative to activate the film reel to release film at particular position of the film with respect to the sensors, whereby a loop is maintainable between the film reel and the surface supporting the film for indexing. However, Rosenthal teaches a film reel 4 for supplying film and a loop, which is maintained between the film reel and a surface for supporting the film. See Figs. 1-4 and col. 1, lines 45-55 and col. 2, lines 1-14 in Rosenthal. It would have been obvious to a person of ordinary skill in the art to provide the film in Price's cutting device, as modified by above, with the loop as taught by Rosenthal in order to eliminate the need of supplying power for pulling the film from the reel by the feeding mechanism. Price in view of Oakes and Rosenthal does not teach that the sensors maintain the loop on the film. However, the use of sensors to maintain the loop on the film is well known in the art such as taught by Ando. Ando teaches loop sensor 112 for sensing the loop portion 108 of the film.

See Figs. 3-6 and page 10, paragraphs 108-111 in Ando. It would have been obvious to a person of ordinary skill in the art to provide Price's cutting device, as modified above, with one or more loop sensors as taught by Ando in order to maintain the loop on the film.

Regarding claim 7, Price, as modified by above, teaches everything noted above including one or more rollers 7 situated between the film reel 4 and the linear feeding device to bring the film substantially level with the surface supporting the film. Se Fig. 1 in Rosenthal.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Oakes, as applied to claim 1, and in further view of Von Hofe et al. (3,756,899), hereinafter Hofe. Regarding claim 8, Price teaches everything noted above except a collecting reel to which a baking cover peeled off from the film is coupled, for collecting backing cover peeled off from the film during indexing. However, the use of collecting reel for collecting a baking cover of a film or the like is well known in the art such as taught by Hofe. Hofe teaches a collecting reel 66 for collecting the backing cover of the film L. See Fig. 2B and col. 5, lines 24-62 in Hofe. It would have been obvious to a person of ordinary skill n the art provide Price's cutting device, as modified by above, with the collecting reel as taught by Hofe in order to collect the backing cover of the film.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Oakes, and Hofe, as applied to claim 8, and in further view of Moisio (6,297,882). Regarding claim 9, Price, as modified by above, does not teach sensors adjacent the backing cover that are operative to sense a distance from the backing cover to the collecting sensors and initiate driving of the collecting reel for collecting backing cover from the film at a predetermined

distance of the backing cover to the collecting sensors. However, the use of sensor located at fixed at a predetermined distances from a roll of film or web to initiate driving the roll of film and paper is well known in the art such as taught by Moisio. Moisio teaches sensors 4, 4', 4" adjacent a backing cover 2 that are operative to sense a distance from the backing cover to the collecting sensors and initiate driving of the collecting reel for collecting backing cover from the film at a predetermined distance of the backing cover to the collecting sensors. See Figs. 1-4 and col. 3, lines 5-65 in Mosios. It would have been obvious to a person of ordinary skill in the art to provide Price's cutting device, as modified above, with the sensors as taught by Moisio In order to measure the size of the roll of colleting reel and determined when it has to be replaced.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view of Oakes, as applied to claim 1, and in further view of Nam et al. (2002/0109217), hereinafter Nam. Regarding claim 10, Price, as modified above, teaches everything noted above except a pick up device movable between the trimming device and a placement position and an optical device positioned under the pick-up device for inspecting a piece of film on the pick-up device. Nam teaches a pick up device 52 movable between the trimming device 48 and a placement position 66. Se Fig. 4 in Nam. It would have been obvious to a person of ordinary skill in the art provide Price's cutting device, as modified above, with the picking device as taught by Nam in order to pick up the to apply the film on the workpiece. Price, as modified above, does not teach an optical device to inspect a piece of film. However, Official notice is taken that the use of optical devices for inspection of the cut pieces are well known in the art such as is evident in Thomson et al. (5,046,389).

9. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price in view Oakes, as applied to claim 1, and in further view of Dueck (6,647,872). Regarding claims 11 and 12, Price, as modified above, teaches everything noted above except a sensor to detecting a presence of a length of film. However, the used of sensors to detect end-of-film or workpiece and the use a sensor for detecting a presence of a length of film or workpiece are well known in the art such as taught by Dueck. Ducke teaches a sensor for detecting the presence of workpiece. See Col. 2, lines10-20 in Dueck. It would have been obvious to a person of ordinary skill in the art provide Price's cutting device, as modified above, with the sensor as taught by Dueck in order to detect the presence of the film.

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Price and Oakes, as modified in claim 1, and in further view of Yamaguchi et al. (5,239,904), hereinafter Yamaguchi. Price, as modified above, teaches everything noted above except a sensor for detecting end-of-film on and initiating an action to stop feeding film to the trimming device. However, the used of sensors to detect end-of-film or workpiece and the use a sensor for detecting a presence of a length of film or workpiece are well known in the art such as taught by Yamaguchi. Yamaguchi teaches a sensor E for detecting end-of-film on and initiating an action to stop feeding film to the trimming device. See col. 12, lines 1-25 in Yamaguchi. It would have been obvious to a person of ordinary skill in the art provide Price's cutting device, as modified above, with the sensor as taught by Yamaguchi in order to detect the leading end of the film.

Response to Amendment

11. Applicant's arguments filed on 01/24/07 have been fully considered but they are not

persuasive.

Applicant's argument that Price does not teach that the film holder holds the film along a line extending transversely of the film feed direction and along which the film is severed is not persuasive. It should be noted that the film 17 is clamped between the holding film 17 and the film support positioned opposite of the film holder 70. It should also be noted that the film holder 70 extends transversely along the length of a transverse line. The film holding 70 clamps the film 17 along a transverse line and along which the trimming device trims the film. It should be noted that the transverse line on which the film holder 70 clamps the film is also located along the trimming device. This is also true in Oaks. In other words, the film is clamped by the film holder 70 along a transverse line that s also located along the trimming device. See Figs. 1-3 and col. col. 3, lines 14-73 in Price.

Applicant's argument that the finger o the film holder 70 only provide supports at a single point and does not provide clamping along the length of a transverse line is not persuasive. Price discloses,

"[i] order to gild the tape 17 against retraction upon the return strike of feeding finger or detent 20, especially when a relatively thin or light type is used, a gravity or a spring press finger 70 is lowered against and rests on the top of tape 17 and releasably holds the latter against the table top extension 51. Finger 70 is slidably mounted in guide member 71 and is lifted or released from contact with the top by the plunger 72 of the solenoid 73 when the latter is energized."

The film holder 70 at least extends transversely along a line that extends along a portion of the length of the film. Claim 1 does not require that the film holder extends along the whole length of the film. In addition, Oakes teaches that the film holder extends Oakes teaches a holding device 134 extending along a transverse line extending along the whole length of the film.

Applicant's argument that the film in Price is not even clamped at the cutting line, much less, along its length is not persuasive. Claim 1 does not call for the film to be clamped "at the cutting line." This limitation is not recited in any of the claims. Claim 1 merely recites, "the film is clamped along the length of a line extending transversely of the film feed direction and along which the film is severed by the trimming device. As stated above, Price as modified by Oakes, teaches that the film holder is located upstream of the knife 52, and it is clamped by the film holder along a transverse line that is locate along which the cutting line or along which the film is severed by the trimming device.

Applicant's argument that there is no suggestion to combine Price with Oaks is not persuasive. It should be noted that the trimming device and the holding device in Oaks and Price functionally are equivalent, since the cutting mechanism in Oaks and Price both hold the film and trim the film. Therefore, it would have been obvious to a person of ordinary skill in the art to locate the holding device in Price's cutting mechanism between the feeding device and the trimming device, as taught by Oaks, since the cutting mechanisms in Price and Oaks function the same and the holding mechanism functions the same in both cutting mechanisms. The holding mechanism in Price functions the same as long as is located

adjacent to the trimming device. The holding mechanism in Price function the same whether is located on the left side of the trimming device or the right side of the trimming device.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hoffmann (2002/0170402), Kohda (6,681,667), and Dom et al. (4,942,796) teach a trimming apparatus including a holding device that is located substantially along the line that a workpiece is severed.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (571) 272-4501. The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, SEE http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ghassem Alie
Patent Examiner
Art Unit 3724

GA/ga

March 19, 2007